

# PATENT ABSTRACTS OF JAPAN

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## (54) MULTI-CHANNEL SIGNAL PROCESSOR

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To obtain a multi-channel signal processor where arrival time can properly compensated, depending on the arrangement of speakers and deterioration in signal accuracy and increase in noise are not caused.

**SOLUTION:** A low-frequency signal extracted from a signal given to a speaker, whose low-frequency reproduction capability is not enough is given to a speaker with a sufficient low frequency reproduction capability for reproducing the low frequency component, depending on the type of the speaker in use and the use of the speaker. In this case, the signal is separated into a left digital signal and a right digital signal, and digital delay processing is applied to each of them independently and are converted respectively into a left analog signal and a right analog signal. The analog signals are summed. Thus, a proper output can be obtained depending on the capability and number of the speakers in use. Moreover, deviation in the arrival time, deterioration in the signal accuracy and increase in noise can be prevented.

